

Update on EPA Underground Injection Control (UIC) Program Activities: Presentation at the KDHE Geology Section's Fall 2015 Seminar

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Background

- The Safe Drinking Water Act (SDWA) requires EPA to protect underground sources of drinking water (USDWs) from contamination caused by underground injection (Sections 1421, 1422 and 1425).
- Section 1431 contains provisions to address imminent and substantial endangerment to health.
- The federal UIC regulations can be found at 40 CFR 144 through 148.
- The State of Kansas obtained primacy for both the 1422 and 1425 portions of the UIC program in December 1983, and was one of the first states to obtain primacy of the program.

EPA Hydraulic Fracturing Study

- The hydraulic fracturing study is being conducted by EPA's Office of Research and Development (ORD) and includes several studies covering well injection, flowback and produced water, wastewater treatment and waste disposal, and other topics.
- On June 5, 2015, ORD released a draft of the report for public comment and Science Advisory Board (SAB) review.
- The draft assessment concluded that there are above and below ground mechanisms by which hydraulic fracturing activities have the potential to impact drinking water resources.
- While the report found specific instances where one or more mechanisms led to impacts on drinking water resources, including contamination of drinking water wells, EPA did not find evidence that these mechanisms have led to widespread, systemic impacts on drinking water resources in the United States.
- The 85-day comment period ended on August 28, 2015. EPA and the SAB are in the process of peer reviewing the document and analyzing the comments received.
- Information/updates on EPA's Study of Hydraulic Fracturing can be found at: www2.epa.gov/hfstudy

CO₂ Geologic Sequestration (GS)

- On Sept. 7, 2011, EPA formally began implementing the Class VI program until primacy for the program is delegated.
- No formal application for primacy of the Class VI program has been made by any state in Region 7. Only one state nationally has applied for primacy and that application is under review.
- Region 7 received a draft permit application for a small-scale pilot Carbon Capture and Storage (CCS) project in Sumner County, Kansas, in June 2014. The application was submitted by the Kansas Geological Survey on behalf of Berexco, LLC, and the draft application is currently under review by the region.
- Several EPA guidance documents are now available at:
<http://water.epa.gov/type/groundwater/uic/class6/gsguidedoc.cfm>

Induced Seismicity

- EPA's UIC Technical Workgroup released their report, "Minimizing and Managing Potential Impacts of Injection-Induced Seismicity from Class II Disposal Wells: Practical Approaches" in December 2014.
- The report's purpose is to identify practical approaches that the UIC Director may use to minimize and manage injection-induced seismicity.
- At this time, EPA is unaware of any USDW contamination resulting from seismic events related to injection-induced seismicity.
- The report can be found at:
<http://www.epa.gov/r5water/uic/ntwg/pdfs/induced-seismicity-201502.pdf>

Find Out More About the UIC Program and Keep Current on the HF Study and CO₂ GS

- EPA Underground Injection Control Website:
<http://water.epa.gov/type/groundwater/uic/index.cfm>
- EPA Hydraulic Fracturing Website:
www2.epa.gov/hydraulicfracturing
- EPA CO₂ Geologic Sequestration Website:
http://water.epa.gov/type/groundwater/uic/wells_sequestration.cfm

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